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ABSTRACT

Findings are reported from a survey of state- and territorial-level supervisors of trade and industrial education to rate trends and issues in trade and industrial education. (A trend was defined as a course of events or action that is present and likely to continue in the future. An issue was defined as a difference of opinion, dispute, or professional controversy regarding a course of action.) Six tables identify (1) the top 10 trend items, (2) the top 10 issue items, (3) the top trend items within each of the 11 categories of the opinionnaire, (4) the top issue items within each of the 11 categories of the opinionnaire, (5) a listing of additional trend and issue items provided by respondents, and (6) a summary of all responses and their calculated means. The 11 categories of trend and issue items are advisory boards; articulation; curriculum; delivery; followup, placement, and evaluation; funding; guidance and counseling; handicapped and disadvantaged students--special needs; program planning and access; sex-role equity; and teacher preparation and upgrading. The opinionnaire is appended. (YLB)

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A Report On

TRENDS AND ISSUES IN TRADE AND INDUSTRIAL EDUCATION

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Trade and Industrial Education Research Council

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

INTRODUCTION

The following report is the result of activities pursued by an ad hoc research team of the American Vocational Association Trade and Industrial Education Research Council. Members of this team were Chester Wichowski, Director of the Statewide Curriculum Development Project, N.J. Vocational-Technical Curriculum Laboratory, Rutgers University and Gordon McMahon, Director of the National Occupational Competency Testing Institute, Albany, N.Y. Dr. Wichowski served as team leader.

The topic of this investigation was identified during the December 3, 1979 meeting of the American Vocational Association Trade and Industrial Education Research Council meeting, Anaheim, California. The basic design used to conduct this research effort was also developed at this meeting.

PROCEDURE

The Population

The population used in this investigation consisted of the state level supervisors of trade and industrial education in the United States and the territorial level supervisors of trade and industrial education in the U.S. Virgin Islands and Puerto Rico. These individuals were identified through a review of the "Directory of Federal and State Officials" which appeared in the April 1980 edition of School Shop. It should be noted that several states in the directory did not have listings under the heading of trade and industrial education. In those instances industrial education, trade and technical education and vocational industrial education headings were used to identify members of the population. Only one individual in each state or territory was included as a member of the population.

All members of the population (N=52) were sent a copy of the survey instrument, a postage paid return addressed envelop and a transmittal letter. Copies of the survey instrument and transmittal letter are included in Appendix A. Thirty-eight members of the population (73.08%) responded to the survey. No follow-up mailing was conducted.

The Research Instrument

A four page opinionnaire was specifically designed to collect data in this study. The research instrument was initially developed through a review of the literature and consultation with faculty members of the Division of Vocational Education, Florida International University. A total of forty-four items equally distributed among eleven categories were identified. An open-ended item was also included in each of the eleven categories to solicit additional input from members of the population.

Two sets of rating scales were provided with each item. A dichotomous yes or no scale was utilized for trend ratings. A five point Likert scale, with a low of one and a high of five, was utilized for issue ratings.

Revision of the instrument was completed following a review of suggestions provided by several members of Trade and Industrial Education Research Council. Definitions for a trend and an issue were developed for use as a part of the instrument as a result of this input. These terms were defined as follows:

TREND: A course of events or action which is present and is likely to continue in the future.

ISSUE: A difference of opinion, dispute or professional controversy regarding a course of action.

A copy of the instrument as it was used in this study is included in Appendix A.

FINDINGS

Means were calculated for all ratings collected. Mean calculations for dichotomous ratings were achieved through the assignment of numerical values to yes and no responses. A yes response was assigned a value of one, a no response was assigned a value of two. Descending rank ordering was identified through an inspection of calculated means.

The remainder of this report includes tables which identify:

1. The top ten trend items. - Table 1
2. The top ten issue items. - Table 2
3. The top trend items within each of the eleven categories of the opinionnaire. - Table 3
4. The top issue items within each of the eleven categories of the opinionnaire. - Table 4
5. A listing of additional trend and issue items provided by respondents. - Table 5
6. A summary of all responses and their calculated means. - Table 6

TABLE 1
TREND ITEMS RECEIVING THE GREATEST
FREQUENCY OF YES RESPONSES

OPINIONNAIRE REFERENCE	OPINIONNAIRE ITEM	MEAN*	RANK
I - 3	Expansion of the number of women and minorities in T&I programs.	1.00	1.5
J - 2	The reduction of barriers which affect entry of men and women in non-traditional sex role T&I occupational program areas.	1.00	1.5
J - 1	The encouragement of men and women to enter non-traditional sex role T&I occupational program areas.	1.03	3.5
H - 1	Increased availability and access of T&I programs for special needs students.	1.03	3.5
A - 1	The development of a more balanced membership composition to include representatives from labor organizations, employers and the general public.	1.05	5
C - 3	Further development or expansion of energy technology programs.	1.08	6
A - 2	Increase the effectiveness of advisory boards in terms of impact on T&I education.	1.11	7.5
D - 2	Increased delivery of T&I programs for minority group members, women, or students who are handicapped or disadvantaged.	1.11	7.5
K - 1	The development of alternative methods for the delivery of teacher education programs for pre-service and in-service T&I education teachers.	1.16	10.5
J - 3	Greater use of in-service education for T&I instructors to aid in the achievement of sex role equity.	1.16	10.5
I - 1	Upgrading of obsolete facilities and/or equipment.	1.16	10.5
C - 4	Increased development or expansion of work-study and cooperative T&I education programs.	1.16	10.5

*Based on the assignment of numerical values to yes and no responses: Yes = 1, No = 2.

TABLE 2
ISSUE ITEMS WITH THE HIGHEST CALCULATED MEANS

OPINIONNAIRE REFERENCE	OPINIONNAIRE ITEM	MEAN*	RANK
H - 3	Expanded linkages between T&I instructors, counselors and administrators in order to mainstream special needs students.	3.83	1
H - 1	Increased availability and access of T&I programs for special needs students.	3.65	2
C - 2	Elimination or reduction of programs with low enrollments or low job placement records.	3.61	3
J - 1	The encouragement of men and women to enter non-traditional sex role T&I occupational program areas.	3.60	4
H - 4	The use of class size limits and/or proportional limits of special needs students in T&I programs.	3.54	5
J - 2	The reduction of barriers which affect entry of men and women in non-traditional sex role T&I occupational program areas.	3.46	6
K - 2	The development of recruitment strategies to attract journeymen into T&I teaching positions.	3.43	7
I - 3	Expansion of the number of women and minorities in T&I programs.	3.41	8
G - 3	The use of school counselors in career guidance for potential T&I students.	3.38	9
D - 2	Increased delivery of T&I programs for minority group members, women, or students who are handicapped or disadvantaged.	3.38	10

*Calculated on responses to a 5 point Likert scale with a low of 1 and a high of 5.

TABLE 3
TREND ITEMS WITHIN OPINIONNAIRE CATEGORIES
RECEIVING THE GREATEST FREQUENCY OF YES RESPONSES

OPINIONNAIRE CATEGORIES AND ITEMS	Mean*	Rating Yes	No
SECTION A: ADVISORY BOARDS			
The development of a more balanced membership composition to include representatives from labor organizations, employers and the general public.	1.05	36	2
SECTION B: ARTICULATION			
Increase articulation between T&I programs with other educational institutions at other levels.	1.28	26	10
SECTION C: CURRICULUM			
Further development or expansion of energy technology programs.	1.08	32	6
SECTION D: DELIVERY			
Increased delivery of T&I programs for minority group members, women, or students who are handicapped or disadvantaged.	1.11	34	4
SECTION E: FOLLOW-UP, PLACEMENT AND EVALUATION			
The use of advisory boards and T&I instructors in placing program graduates.	1.14	30	5
SECTION F: FUNDING			
Increased availability of grants to support new or exemplary T&I programs.	1.45	18	15
SECTION G: GUIDANCE AND COUNSELING			
Increased effort to place T&I students in the program area of their choice.	1.08	33	3
SECTION H: HANDICAPPED AND DISADVANTAGED STUDENTS - SPECIAL NEEDS			
Increased availability and access of T&I programs for special needs students.	1.03	36	1
SECTION I: PROGRAM PLANNING AND ACCESS			
Expansion of the number of women and minorities in T&I programs.	1.00	37	0
SECTION J: SEX ROLE EQUALITY			
The reduction of barriers which affect entry of men and women in non-traditional sex role T&I occupational program areas.	1.00	35	0
SECTION K: TEACHER PREPARATION AND UPGRADING			
The development of alternative methods for the delivery of teacher education programs for pre-service and in-service T&I education teachers.	1.16	31	6

*Based on the assignment of numerical values to yes and no responses: Yes = 1, No = 2.

TABLE 4
ISSUE ITEMS WITHIN OPINIONNAIRE CATEGORIES WITH
THE HIGHEST CALCULATED MEANS

OPINIONNAIRE CATEGORIES AND ITEMS	Mean*	Rating (Low) 1	2	3	4	(High) 5
SECTION A: ADVISORY BOARDS Increase the effectiveness of advisory boards in terms of impact on T&I education.	3.04	3	6	4	7	3
SECTION B: ARTICULATION Increase articulation between T&I programs with other educational institutions at other levels.	3.27	4	2	8	7	5
SECTION C: CURRICULUM Elimination or reduction of programs with low enrollments or low job placement records.	3.61	5	1	7	9	11
SECTION D: DELIVERY Increased delivery of T&I programs for minority group members, women, or students who are handicapped or disadvantaged.	3.38	3	2	10	6	5
SECTION E: FOLLOW-UP, PLACEMENT AND EVALUATION The use of job placement as a sole method of program evaluation.	3.21	6	6	5	7	7
SECTION F: FUNDING The use of weighted F.T.E funding for T&I programs.	3.32	5	2	5	6	7
SECTION G: GUIDANCE AND COUNSELING The use of school counselors in career guidance for potential T&I students.	3.38	3	3	6	9	5
SECTION H: HANDICAPPED AND DISADVANTAGED STUDENTS - SPECIAL NEEDS Expanded linkages between T&I instructors, counselors and administrators in order to mainstream special needs students.	3.83	3	3	3	11	6
SECTION I: PROGRAM PLANNING AND ACCESS Expansion of the number of women and minorities in T&I programs.	3.41	2	4	7	9	5
SECTION J: SEX ROLE EQUALITY The reduction of barriers which affect entry of men and women in non-traditional sex role T&I occupational program areas.	3.46	3	4	10	6	5
SECTION K: TEACHER PREPARATION AND UPGRADING The development of recruitment strategies to attract journeymen into T&I teaching positions.	3.43	5	6	2	4	8

*Calculated on responses to a 5 point Likert side with a low of 1 and a high of 5.

TABLE 5
LISTING OF ADDITIONAL TREND AND ISSUE ITEMS PROVIDED
BY RESPONDENTS

OPINIONNAIRE CATEGORIES AND ADDITIONAL ITEMS	Trend	Degree of Issue
SECTION A: ADVISORY BOARDS		
1. Increased frequency of meetings.	Yes	---
2. Formulation of more effective advisory groups to assist with delivery systems of T&I teacher education.	Yes	---
3. The development, evaluation and discontinuance of T&I programs.	Yes	4
4. Increased interaction with community councils.	---	---
SECTION B: ARTICULATION		
1. A means of identifying and defining "turf."	---	---
SECTION C: CURRICULUM		
1. Industrially determined curriculum requirements.	---	---
2. Expansion of existing T&I programs to meet needs.	Yes	5
3. Increased resistance by unions to work-study programs.	Yes	5
SECTION D: DELIVERY		
1. More effective training programs for the incarcerated.	Yes	---
2. Correctional institutions.	Yes	---
SECTION E: FOLLOW-UP, PLACEMENT AND EVALUATION		
1. Evaluation of educators by educators only.	No	5
SECTION F: FUNDING		
None	---	---
SECTION G: GUIDANCE AND COUNSELING		
1. More emphasis on programs for non-traditional career opportunities.	Yes	---
2. Early preparation and non-tracking for technical students.	Yes	---
SECTION H: HANDICAPPED AND DISADVANTAGED STUDENTS - SPECIAL NEEDS		
None	---	---
SECTION I: PROGRAM PLANNING AND ACCESS		
1. Planners vs. societal reality.	---	---
SECTION J: SEX ROLE EQUITY		
None	---	---
SECTION K: TEACHER PREPARATION AND UPGRADING		
1. Facilitating mechanisms for professional and personal growth.	Yes	4
2. Lets not use industrial arts teacher education programs to train T&I teachers.	No	5

TABLE 6

SUMMARY OF THE RESPONSES OF STATE SUPERVISORS
TO THE TRENDS AND ISSUES IN TRADE AND INDUSTRIAL EDUCATION SURVEY

OPINIONNAIRE CATEGORIES AND ITEMS	TREND (1) Yes	TREND (2) No	TREND Mean*	ISSUE (Low) 1	2	3	4	(High) 5	ISSUE Mean
SECTION A: ADVISORY BOARDS									
1. The development of a more balanced membership compositon to include representatives from labor organizations, employers and the general public.	36	2	1.05	3	10	6	3	2	2.63
2. Increase the effectiveness of advisory boards in terms of impact on T&I education.	34	4	1.11	3	6	4	7	3	3.04
3. Increase the relationship of local advisory boards to regional and state level advisory boards.	21	17	1.45	2	7	7	4	3	2.74
4. Formalize the operation and governance of advisory boards.	21	15	1.41	3	4	10	3	2	2.86
SECTION B: ARTICULATION									
1. Increase articulation between T&I programs with other educational institutions at the same level.	25	13	1.34	5	1	6	9	3	3.17
2. Increase articulation between T&I programs with other educational institutions at other levels.	26	10	1.28	4	2	8	7	5	3.27
3. The use of articulation as an aid for student recruitment.	24	12	1.33	6	5	8	5	2	2.69
4. The use of articulation as an aid for student selection and placement.	20	16	1.44	6	6	4	4	1	2.43

*Based on the assignment of numerical values to yes and no responses: Yes = 1, No = 2.

OPINIONNAIRE CATEGORIES AND ITEMS	TREND (1) Yes	(2) No	Mean*	ISSUE (Low) 1	2	3	4	(High) 5	Mean
SECTION C: CURRICULUM									
1. Greater effort in the development and evaluation of new and emerging T&I program areas.	27	9	1.25	6	2	10	4	4	2.92
2. Elimination or reduction of programs with low enrollments or low job placement records.	27	14	1.21	5	1	7	9	11	3.61
3. Further development or expansion of energy technology programs.	32	6	1.08	4	5	10	5	3	2.93
4. Increased development or expansion of work-study and cooperative T&I education programs.	31	6	1.16	4	7	8	5	3	2.85
SECTION D: DELIVERY									
1. Increased delivery of T&I programs to urban areas.	24	14	1.37	4	5	9	5	0	2.65
2. Increased delivery of T&I programs for minority group members, women, or students who are handicapped or disadvantaged.	34	4	1.11	3	2	10	6	5	3.38
3. Greater use of private industry based training programs by contract with local education agencies.	17	20	1.58	8	3	5	5	5	2.85
4. Expanded delivery schedules to include evenings, weekends, summers and/or multiple exit programs.	21	14	1.40	2	5	7	6	4	3.21
SECTION E: FOLLOW-UP, PLACEMENT AND EVALUATION									
1. The use of job placement as a sole method of program evaluation.	7	29	1.81	6	6	5	7	7	3.21
2. Placement of T&I graduates by school counselors or outside agencies.	17	19	1.53	4	5	8	5	6	3.14
3. The use of advisory boards and T&I instructors in placing program graduates.	30	5	1.14	5	5	10	4	3	2.81

*Based on the assignment of numerical values to yes and no responses: Yes = 1, No = 2.

OPINIONNAIRE CATEGORIES AND ITEMS	TREND (1) Yes	(2) No	Mean*	ISSUE (Low) 1	2	3	4	(High) 5	Mean
SECTION E: FOLLOW-UP, PLACEMENT AND EVALUATION - CONTINUED									
4. Program review using T&I program graduates as a major source of data.	22	13	1.37	6	3	10	6	1	2.73
SECTION F: FUNDING									
1. The use of weighted F.T.E. funding for T&I programs.	17	32	1.48	5	2	5	6	7	3.32
2. Increased availability of grants to support new or exemplary T&I programs.	18	15	1.45	6	4	3	9	5	3.11
3. Increased availability of local funds to provide continued support for new or exemplary T&I programs.	17	18	1.51	6	6	5	6	3	2.77
4. The development of a funding balance between T&I and other educational programs.	17	17	1.50	7	2	6	7	4	2.96
SECTION G: GUIDANCE AND COUNSELING									
1. The use of the Armed Services Vocational Aptitude Battery (ASVAB) testing program.	11	25	1.69	6	5	8	1	1	2.33
2. Increased emphasis on T&I teachers to provide career guidance.	23	12	1.34	7	0	8	11	1	2.96
3. The use of school counselors in career guidance for potential T&I students.	28	7	1.20	3	3	6	9	5	3.38
4. Increased effort to place T&I students in the program area of their choice.	33	3	1.08	7	1	7	4	2	2.67
SECTION H: HANDICAPPED AND DISADVANTAGED STUDENTS - SPECIAL NEEDS									
1. Increased availability and access of T&I programs for special needs students.	36	1	1.03	1	5	4	8	8	3.65

*Based on the assignment of numerical values to yes and no responses: Yes = 1, No = 2.

OPINIONNAIRE CATEGORIES AND ITEMS	TREND (1) Yes	(2) No	Mean*	ISSUE (Low) 1	2	3	4	(High) 5	Mean
SECTION H: HANDICAPPED AND DISADVANTAGED STUDENTS - SPECIAL NEEDS - CONTINUED									
2. Availability of comprehensive student records to T&I instructors.	20	15	1.43	6	3	7	7	3	2.77
3. Expanded linkages between T&I instructors, counselors and administrators in order to mainstream special needs students.	29	6	1.17	3	3	3	11	6	3.83
4. The use of class size limits and/or proportional limits of special needs students in T&I programs.	27	9	1.25	6	0	4	9	9	3.54
SECTION I: PROGRAM PLANNING AND ACCESS									
1. Upgrading of obsolete facilities and/or equipment.	31	6	1.16	5	5	6	5	5	3.00
2. Use of OSHA standards to upgrade and/or modify facilities and equipment.	24	12	1.33	3	7	9	6	3	2.96
3. Expansion of the number of women and minorities in T&I programs.	37	0	1.00	2	4	7	9	5	3.41
4. Reduction or the elimination of minimal age or physical ability requirements necessary to enter some T&I program areas.	18	17	1.49	4	5	6	4	7	3.19
SECTION J: SEX ROLE EQUALITY									
1. The encouragement of men and women to enter non-traditional sex role T&I occupational program areas.	35	1	1.03	2	4	8	6	10	3.60
2. The reduction of barriers which affect entry of men and women in non-traditional sex role T&I occupational program areas.	35	0	1.00	3	4	10	6	5	3.46

*Based on the assignment of numerical values to yes and no responses: Yes = 1, No = 2.

OPINIONNAIRE CATEGORIES AND ITEMS	TREND (1) Yes	(2) No	Mean*	ISSUE (Low) 1	2	3	4	(High) 5	Mean
SECTION J: SEX ROLE EQUALITY - CONTINUED									
3. Greater use of in-service education for T&I instructors to aid in the achievement of sex role equity.	31	6	1.16	5	7	7	4	5	2.89
4. Increased use of trade unions, special interest groups and advisory boards to provide assistance in this area.	21	15	1.42	4	8	6	4	3	2.76
SECTION K: TEACHER PREPARATION AND UPGRADING									
1. The development of alternative methods for the delivery of teacher education programs for pre-service and in-service T&I education teachers.	31	6	1.16	5	7	4	6	5	2.96
2. The development of recruitment strategies to attract journeymen into T&I teaching positions.	21	15	1.42	5	6	2	4	8	3.43
3. Greater use of pre-service teacher education programs for potential T&I instructors.	25	11	1.31	7	7	3	4	6	2.81
4. The development of exchange programs for the skill updating needs of T&I teachers.	18	19	1.51	5	6	6	2	6	2.92

*Based on the assignment of numerical values to yes and no responses: Yes = 1, No = 2.

APPENDIX A

TRANSMITTAL LETTER AND

OPINIONNAIRE

RUTGERS
THE STATE UNIVERSITY
OF NEW JERSEY

GRADUATE SCHOOL OF EDUCATION • DEPARTMENT OF VOCATIONAL-TECHNICAL EDUCATION
CURRICULUM LABORATORY • BUILDING 4103 • KILMER CAMPUS • NEW BRUNSWICK • NEW JERSEY 08903 (201) 932-3845/46/47

September 10, 1980

Dear State T & I Supervisor:

As a member of the Trade and Industrial Education Research Committee for the American Vocational Association, I am conducting a survey to identify current and/or projected trends and issues in the area of Trade and Industrial Education. Knowledge of this type is vital to the educational researcher and practitioner.

Please take approximately twenty minutes out of your busy schedule to assist in these research efforts by completing the enclosed opinionnaire. Do not hesitate to add other catagories or comments which you feel appropriate in the space provided.

The data collected through this research effort will be reported as part of the T & I Research Committee's Program at the 1980 AVA Convention in New Orleans.

Return completed opinionnaires by September 30, 1980. A preaddressed postage paid return envelope has been included for your convenience.

Your cooperation and assistance in this matter is greatly appreciated.

Sincerely yours,

Chester Wichowski
Vocational-Technical Curriculum Laboratory
Rutgers University-Kilmer Campus
New Burnswick, N.J. 08903

/ma
Encl.

The New Jersey Vocational-Technical Curriculum Laboratory
A Service of the Division of Vocational Education and Career Preparation — New Jersey Department of Education

TRENDS AND ISSUES IN

TRADE AND INDUSTRIAL EDUCATION

OPINIONNAIRE

DIRECTIONS: Read each of the statements listed below. If you perceive a statement to be a current trend in T&I education, circle the Y response in the TREND column. If it is not, circle the N response.

If you feel there is any degree of controversy associated with the development or implementation of the statements listed, rate the degree to which you perceive this as an issue by placing a circle around the appropriate numerical value in the ISSUE column.

Use the following definitions as an aid in completing this opinionnaire:

TREND: A course of events or action which is present and is likely to continue in the future.

ISSUE: A difference of opinion, dispute or professional controversy regarding a course of action.

	TREND		ISSUE				
	YES	NO	LOW				HIGH
A. ADVISORY BOARDS							
1. The development of a more balanced membership composition to include representatives from labor organizations, employers and the general public.	Y	N	1	2	3	4	5
2. Increase the effectiveness of advisory boards in terms of impact on T&I education.	Y	N	1	2	3	4	5
3. Increase the relationship of local advisory boards to regional and state level advisory boards.	Y	N	1	2	3	4	5
4. Formalize the operation and governance of advisory boards.	Y	N	1	2	3	4	5
5. OTHER: _____	Y	N	1	2	3	4	5
_____							
_____							
B. ARTICULATION							
1. Increase articulation between T&I programs with other educational institutions at the <u>same</u> level.	Y	N	1	2	3	4	5
2. Increase articulation between T&I programs with other educational institutions at <u>other</u> levels.	Y	N	1	2	3	4	5
3. The use of articulation as an aid for student recruitment.	Y	N	1	2	3	4	5
4. The use of articulation as an aid for student selection and placement.	Y	N	1	2	3	4	5
5. OTHER: _____	Y	N	1	2	3	4	5
_____							
_____							

	TREND		ISSUE				
C. CURRICULUM	YES	NO	LOW				HIGH
1. Greater effort in the development and evaluation of new and emerging T&I program areas.	Y	N	1	2	3	4	5
2. Elimination or reduction of programs with low enrollments or low job placement records.	Y	N	1	2	3	4	5
3. Further development or expansion of energy technology programs.	Y	N	1	2	3	4	5
4. Increased development or expansion of work-study and cooperative T&I education programs.	Y	N	1	2	3	4	5
5. OTHER: _____	Y	N	1	2	3	4	5
_____							
_____							
D. DELIVERY							
1. Increased delivery of T&I programs to urban areas.	Y	N	1	2	3	4	5
2. Increased delivery of T&I programs for minority group members, women, or students who are handicapped or disadvantaged.	Y	N	1	2	3	4	5
3. Greater use of private industry based training programs by contract with local education agencies.	Y	N	1	2	3	4	5
4. Expanded delivery schedules to include evenings, weekends, summers and/or multiple exit programs.	Y	N	1	2	3	4	5
5. OTHER: _____	Y	N	1	2	3	4	5
_____							
_____							
E. FOLLOW-UP, PLACEMENT AND EVALUATION							
1. The use of job placement as a sole method of program evaluation.	Y	N	1	2	3	4	5
2. Placement of T&I graduates by school counselors or outside agencies.	Y	N	1	2	3	4	5
3. The use of advisory boards and T&I instructors in placing program graduates.	Y	N	1	2	3	4	5
4. Program review using T&I program graduates as a major source of data.	Y	N	1	2	3	4	5
5. OTHER: _____	Y	N	1	2	3	4	5
_____							
_____							

	TREND		ISSUE				
	YES	NO	LOW				HIGH
F. FUNDING							
1. The use of weighted F.T.E. funding for T&I programs.	Y	N	1	2	3	4	5
2. Increased availability of grants to support new of exemplary T&I programs.	Y	N	1	2	3	4	5
3. Increased availability of local funds to provide continued support for new or exemplary T&I programs.	Y	N	1	2	3	4	5
4. The development of a funding balance between T&I and other educational programs.	Y	N	1	2	3	4	5
5. OTHER: _____	Y	N	1	2	3	4	5
_____							
_____							
G. GUIDANCE AND COUNSELING							
1. The use of the Armed Services Vocational Aptitude Battery (ASVAB) testing program.	Y	N	1	2	3	4	5
2. Increased emphasis on T&I teachers to provide career guidance.	Y	N	1	2	3	4	5
3. The use of school counselors in career guidance for potential T&I students.	Y	N	1	2	3	4	5
4. Increased effort to place T&I students in the program area of their choice.	Y	N	1	2	3	4	5
5. OTHER: _____	Y	N	1	2	3	4	5
_____							
_____							
H. HANDICAPPED AND DISADVANTAGED STUDENTS (Special Needs)							
1. Increased availability and access of T&I programs for special needs students.	Y	N	1	2	3	4	5
2. Availability of comprehensive student records to T&I instructors.	Y	N	1	2	3	4	5
3. Expanded linkages between T&I instructors, counselors and administrators in order to mainstream special needs students.	Y	N	1	2	3	4	5
4. The use of class size limits and/or proportional limits of special needs students in T&I programs.	Y	N	1	2	3	4	5
5. OTHER: _____	Y	N	1	2	3	4	5
_____							
_____							

	TREND		ISSUE				
	YES	NO	LOW				HIGH
I. PROGRAM PLANNING AND ACCESS							
1. Upgrading of obsolete facilities and/or equipment.	Y	N	1	2	3	4	5
2. Use of OSHA standards to upgrade and/or modify facilities and equipment.	Y	N	1	2	3	4	5
3. Expansion of the number of women and minorities in T&I programs.	Y	N	1	2	3	4	5
4. Reduction or the elimination of minimal age or physical ability requirements necessary to enter some T&I program areas.	Y	N	1	2	3	4	5
5. OTHER: _____	Y	N	1	2	3	4	5
_____							
_____							
J. SEX ROLE EQUALITY							
1. The encouragement of men and women to enter non-traditional sex role T&I occupational program areas.	Y	N	1	2	3	4	5
2. The reduction of barriers which affect entry of men and women in non-traditional sex role T&I occupational program areas.	Y	N	1	2	3	4	5
3. Greater use of in-service education for T&I instructors to aid in the achievement of sex role equity.	Y	N	1	2	3	4	5
4. Increased use of trade unions, special interest groups and advisory boards to provide assistance in this area.	Y	N	1	2	3	4	5
5. OTHER: _____	Y	N	1	2	3	4	5
_____							
_____							
K. TEACHER PREPARATION AND UPGRADING							
1. The development of alternative methods for the delivery of teacher education programs for pre-service and in-service T&I education teachers.	Y	N	1	2	3	4	5
2. The development of recruitment strategies to attract journeymen into T&I teaching positions.	Y	N	1	2	3	4	5
3. Greater use of pre-service teacher education programs for potential T&I instructors.	Y	N	1	2	3	4	5
4. The development of exchange programs for the skill updating needs of T&I teachers.	Y	N	1	2	3	4	5
5. OTHER: _____	Y	N	1	2	3	4	5
_____							
_____							

PLACE ANY COMMENTS YOU MAY HAVE ON THE REVERSE SIDE OF THIS PAGE.